

ABSTRACT

A method of tuning a high temperature superconductor (HTS) resonator includes the steps of providing a HTS inductor and a HTS capacitor, the HTS capacitor being electrically connected to the HTS inductor. A tuning body is provided adjacent to the 5 HTS inductor and the HTS capacitor. The relative position of the tuning body with respect to the HTS inductor and the HTS capacitor is altered so as to tune the resonator. A tunable resonant circuit is provided that includes a substrate having a planar surface. At least one resonator formed from HTS material is disposed on the substrate, the resonator having one or more turns that when combined, turn through greater than 360°.